

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

**(19) World Intellectual Property Organization  
International Bureau**



**(43) International Publication Date  
6 May 2005 (06.05.2005)**

PCT

(10) International Publication Number  
**WO 2005/041479 A1**

**(51) International Patent Classification<sup>7</sup>:**  
29/06

H04L, 12/18.

**Agent:** TONSCHIEDT, Andreas; Ericsson Eurolab  
Deutschland GmbH, Ericsson Allee 1, 52134 Herzogenrath (DE).

**(21) International Application Number:**

PCT/EP2003/011720

(22) International Filing Date: 23 October 2003 (23.10.2003)

**(25) Filing Language:** English

(26) Publication Language: English

(71) Applicant (for all designated States except US): TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-164 83 Stockholm (SE).

(72) Inventors; and  
(75) Inventors/Applicants (*for US only*): KELLER, Ralf [DE/DE]; Talblick 22, 52146 Würselen (DE). LOHMAR, Thorsten [DE/DE]; Hirschgraben 9-11, 52062 Aachen (DE). HUNDSCHEIDT, Frank [NL/NL]; In de Boomgaard 26, NL-6464 GC Kerkrade (NL).

(81) **Designated States (national):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

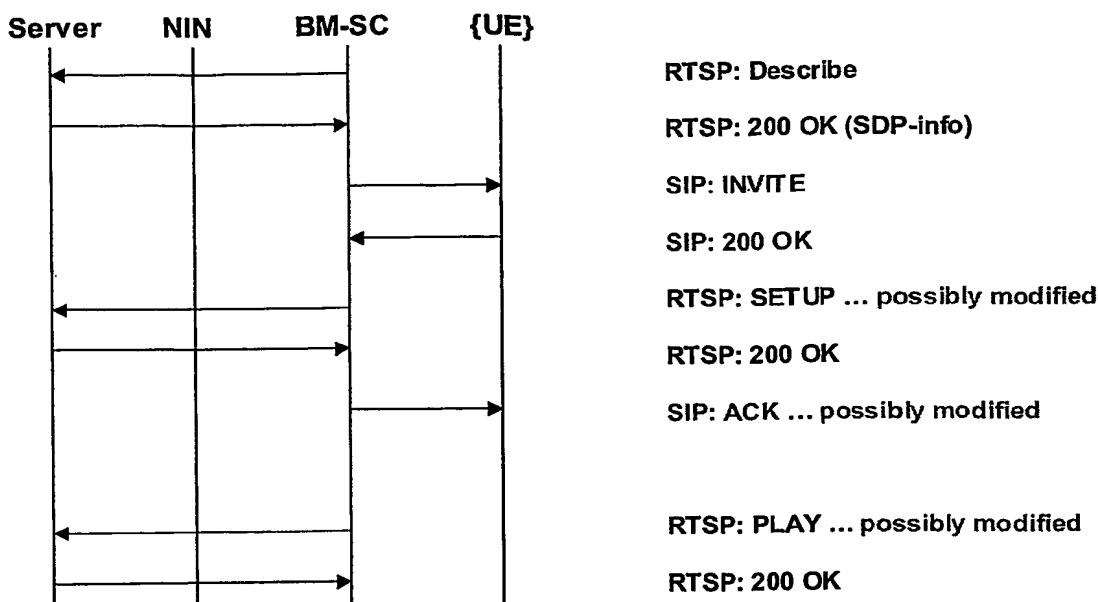
(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

[Continued on next page]

(54) Title: MULTI-USER STREAMING



**(57) Abstract:** The invention provides a solution for performing multicast for streaming transmission in a telecommunication system. An intermediate node is proposed which is able to connect the functionality of a broadcast/multicast server and of a streaming node. Further the intermediate node is responsible for the establishment of a bearer for multicast transmission. The establishment of a session is done by means of a translation the on-demand single-use signalling into multi-user push signalling. Furthermore an adaptation of the streaming flow for a whole multicast group or for individual subgroups of a multicast group is performed.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*